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ABSTRACT

To validate a proposed statistical index of instructional effectiveness, researchers identified 33 school characteristics related to instructional effectiveness and tested the relationship between these characteristics and the proposed index. The index includes two subject area indices, mathematics and reading, and is based on statistical projections from students' California Achievement Test scores, ethnicity, and eligibility for school lunch aid. A committee of 11 educators identified the 33 school characteristics, which included teacher activities, student activities, principals' characteristics, educational materials, school climate, and student and teacher mobility. Using 3 methods--classroom observation in 21 elementary schools, a questionnaire survey of 193 of the schools' teachers, and centralized data sources--researchers measured each school's scores on the 33 characteristics. They tested the characteristics' relationship to the proposed index by correlating each school's math and reading index score with its scores on the characteristics. The results indicate that the reading index has value as a measure of reading instruction effectiveness. A test of an initial causal model to explain the results reveals a poor fit and a need for further research on alternative models. A glossary describing the 33 characteristics and a copy of the teacher survey questionnaire are appended. (RW)

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SCHOOL CHARACTERISTICS ASSOCIATED WITH INSTRUCTIONAL EFFECTIVENESS

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SEATTLE PUBLIC SCHOOLS

Paper presented at the annual meeting of
the American Educational Research Association

March 1982

EA 014 609

SCHOOL CHARACTERISTICS ASSOCIATED WITH INSTRUCTIONAL EFFECTIVENESS

The Research and Evaluation Office of the Seattle Public Schools is currently engaged in activities directed toward developing and validating a statistical index of instructional effectiveness. If validation results so warrant, the index may be used to compare and evaluate instructional units such as schools, programs, and classrooms. Development and validation efforts have centered on three major objectives:

1. To examine statistical methods that have been or might be used to study instructional effectiveness and to select and adapt a viable method for in-depth study.

2. To identify and measure school characteristics that are related to instructional effectiveness.

3. To compare the index produced by the selected statistical method with actual measures of school characteristics to assess the value and meaning of the statistical index.

The methods used and the results obtained in meeting objective 1 were presented at the 1981 AERA annual meeting.[1] The current presentation describes the methods used and results obtained in identifying and measuring selected school characteristics and in comparing these measures with the index provided by the statistical method.

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[1]Matthews, T., J. Soder, M. Ramey, and G. Sanders, Use of Districtwide Test Scores to Compare the Academic Effectiveness of Schools; paper presented at AERA annual meeting, Los Angeles, 1981.

METHOD

Index of Instructional Effectiveness:

As reported in 1981, the method chosen for use as a statistical indicator of instructional effectiveness was multiple regression of spring California Achievement Test (CAT) score on fall CAT score, ethnic category, and eligibility for free or reduced-price lunch. Where trend analysis indicated their statistical significance, polynomial terms in fall test score were included in the multiple regression equation. Separate regression equations were generated for different subject areas (Total Reading and Total Math) and different grades (two through six). For each subject area, the grade appropriate regression equation was used to provide a predicted spring score for each student which was subtracted from his or her actual spring score to yield a residual score. The average residual score for each grade within a school was computed and divided by its standard error (a function of the residual mean square for that grade and the number of students tested in that grade and school). The resulting standard scores were then averaged over all grades tested within a school and multiplied by the square root of the number of grades tested to obtain the school's index score. This method, applied to 1980-81 test score data, yields the index scores referred to in the presert paper. The intent of these numerical manipulations is to remove the effects of major variables not under school control so that resulting index scores more directly reflect the influence of school related variables.

Identification and Measurement of School Characteristics:

An eleven member committee--three teachers, two principals, two curriculum specialists, two evaluators, and two central administrators (representing elementary and compensatory education)--was formed to determine which school characteristics should be examined and how they should be measured. Committee members' experience combined with literature review led to the choice of thirty-three characteristics as promising predictors of academic gain. They are iden-

tified in the following paragraphs, grouped according to method of measurement.

Classroom Observation. Nine district teachers of recognized teaching skill and experience in classroom observation were selected to be observers. Together with the authors, these teachers developed and pilot-studied an observation form and procedures for its use. During the pilot period, observations were continually monitored to insure that inter-observer reliability was maintained at an acceptable level.

Variables measured on the observation form fall into two general categories:

1. Student Activities	Abbreviation[2]
Average percent of student time spent in:	
seat work	SEATWORK
one-to-one instruction	ONETOONE
small group instruction	SMALLGP
total group instruction	TOTALGP
other "okay work"	DIFFWORK
other work, not okay	OFFWORK
being tested	TESTING
nonacademic activities	NOTWORK

[2]The variable abbreviations are used for the sake of brevity in the tables of this paper. A glossary of the terms is provided in Appendix A.

2. Teacher Activities — Abbreviation

Percent of teacher time spent in:

interaction instruction	INTERACT
one-to-one instruction	TEACHONE
lecture	LECTURE
organization	ORGANIZE
discipline	DISCPLIN
total group instruction	TEACHALL
small group instruction	TEACHFEW
not interacting with students	NOTTEACH
monitoring	MONITOR

Because of the time and resources required to conduct classroom observations, it was necessary to limit the study to a sample of schools. Twenty-one elementary schools representing the full range of 1979-80 index scores were selected for further study. A random procedure was used to select classrooms for observation within schools and to assign the 9 observers to classrooms. Logistical considerations, however, eventually forced the assignment of observers to classrooms on a convenience basis. An effort was made to observe each classroom in the sample two times; each of the two observations consisted of approximately thirty consecutive "snapshots" taken at one minute intervals; and each of the two was made by a different observer. A total of 236 observations were completed, representing 122 classrooms. All observations were completed during a three week period beginning in the middle of April 1981. With one exception, the number of observations per school was adequate for school level aggregation, i.e., 6 or more observations; with that exception, all classroom variable measurements were aggregated to the school level.

Teacher Survey. The authors developed a survey of teacher opinions based on content recommendations of the aforementioned steering committee. The survey was designed to obtain demographic information about teachers as well as their opinions concerning building characteristics such as principal style, expec-

tations for students, and the usefulness of the districtwide curriculum. (A copy of the survey is provided as Appendix B.)

Survey forms were sent to all teachers at the 21 sample schools; 193 completed forms (62 percent) were returned with all but two sample schools represented adequately. One of these two schools was the same one which had an inadequate number of observations. Thus we were able to gather adequate survey and observation data for nineteen buildings. The following variables were measured by scales formed from the teacher surveys:

Variable	Abbreviation
Principal's job orientation	PRINJOB
Principal's personnel orientation	PRINPERS
Building climate	BLDGCLIM
Teacher's expectations for students	STUDEX
Emphasis on reading and math	EMPHR&M
Emphasis on student self concept	EMSELF
Perceived usefulness of the district curriculum	DISTCURR
Availability of materials and texts in the building	MA&TEXTS
Minutes per day spent on reading	READMINS
Minutes per day spent on math	MATHMINS

Checks on the survey data consisted of determining whether (1) return rates from individual schools were sufficient to assure confidence in the representativeness of school level data and (2) items presumed to measure a single dimension did so at an acceptable level of reliability. These checks indicated that: (1) two of the twenty-one schools sampled had return rates that were too low to warrant their inclusion in any school level analyses of survey responses; and (2) Cronbach's alpha coefficients, computed over items associated with a given dimension, exceeded .80 for most scales and reached .90 for two scales, principal's job orientation and principal's personnel orientation.

Measurements of the teacher survey variables were aggregated to the school level for the nineteen schools with adequate survey return rates.

Centralized Data Sources. Measures of several school descriptors were obtained from centralized data sources. These included the following for each school:

Variable	Abbreviation
Percent stability or the percent of fall '80 student population which remained at the same building through the spring	PCTSTAB
Percent of students transferring into each school . .	PCTIN
Percent of teachers in each building who had received termination notices due to Reductions in Force (RIF)	RIF
Number of grades in each school	NGRADES
Whether the principal was new or not in 80-81	NEWPRIN
Percentage of teachers new to the school in 1980-81 .	NEWTEACH

Analyses

Analyses are of two kinds, descriptive (correlational) and causal modeling. The correlation analyses have been completed and results are summarized in the following section. Causal models are now being explored using Joreskog's and Sorbom's Linear Structural Relationships (LISREL)[3] mode of analysis to mathematically represent and compare alternative models for "explaining" the relationships found in the descriptive analyses.

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[3]Joreskog, Karl and Dag Sorbom. LISREL Analysis of Linear Structural Relationships by the Method of Maximum Liklihood: User's Guide (IV). Chicago: International Educational Services, 1978.

RESULTS

Correlational

Initial data analyses have relied upon correlations between index scores (READX and MATHX for schoolwide reading and math index scores, respectively) and scores on the other thirty-three variables which were derived from observations (17 variables), surveys (10), and centralized data (6).

Only three sets of variables emerged as signficantly[4] correlated with math index scores: group size (SMALLGP, TOTALGP, and TEACHFEW), percent lecture (LECTURE) and percent teacher time not interacting with students (NOTTEACH). The signs of the group size correlations with MATHX were positive for total group and negative for small group; LECTURE correlated positively with MATHX; and NOTTEACH correlated negatively with MATHX. The relative lack of variables related to MATHX may be a function of our observation schedules. In fact, we made no effort to control for subject matter when we scheduled classrooms for observation, and as it turned out, we did not observe much math instruction.

Results for reading, on the other hand, indicate several variables that correlate either directly or indirectly with the index scores in reading (READX). These variables, twenty-two in all, fall into two levels: those eight which correlate with READX (primary variables) and fourteen more which correlate with one or more of the primary eight (secondary variables).

The variables which correlate significantly[4] with READX are listed in Table 1.

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[4] $p \leq .05$

TABLE 1

PRIMARY VARIABLES
(THOSE WHICH CORRELATE WITH READX)

Survey Variables:	r with READX*	Interpretation:
		IN SCHOOLS WITH HIGHER READX SCORES:
DISTCURR	+.51	Surveyed teachers express positive attitudes toward the district's curriculum and find it useful in their classes.
STUDEX	+.31	Teachers express high expectations for their students.
Observation Variables:		
SEATWORK	+.48	Students tend to do more seat work.
ONETOONE	-.69	Students tend to do less one-to-one work with the teacher.
NOTWORK	-.40	Students spend less time not engaged in academic work.
INTERACT	+.39	Teachers spend more time in interactive instruction.
ORGANIZE	-.54	Teachers spend less class time organizing.
MONITOR	-.39	Teachers spend less class time monitoring.

Fourteen other variables emerge as significant secondary correlates in the study. These correlate with one or more of the primary variables and seem likely to be important to our efforts at building a model which explains the variation in buildings' index scores. Table 2 lists these variables and their correlations with the primary variables.

TABLE 2

SECONDARY VARIABLES
(THOSE WHICH CORRELATE WITH PRIMARY VARIABLES)

		Correlate	r
Survey Variables:			
BLDGCLIM	Building Climate	ORGANIZE	+.43
MA&TEXTS	Availability of Materials and Texts	ONETOONE	+.47
READMINS	Minutes per day spent on reading	STUDEX	+.53
PRINPERS	Principal's Personnel Orientation	SEATWORK	-.48
Observation Variables:			
TOTALGP	Average percent student time in total group instruction	NOTWORK	-.50
SMALLGP	Average percent student time in small group instruction	STUDEX	-.39
TESTING	Average percent student time taking tests	NOTWORK	-.49
TEACHALL	Percent of time in total group instruction	NOTWORK	-.43
TEACHFEW	Percent of time in small group instruction	MONITOR	-.74
TEACHONE	Percent of one-to-one instruction	INTERACT MONITOR	-.59 +.67
DISCPLIN	Percent of time disciplining	INTERACT NOTWORK	-.42 +.47
NOTTEACH	Percent of time not interacting with students	INTERACT	-.60
Other Variables:			
NEWTEACH	Percentage of new teaching staff	INTERACT NOTWORK	+.40 -.43
RIF	Percentage of RIF notices	STUDEX ONETOONE	+.39 -.43

Finally, eleven variables proved to be uncorrelated with READX or with the primary variables. That is, buildingwide reading achievement (as indexed) appears to be unrelated either directly or indirectly to these thirteen: DIFFWORK, OFFWORK, LECTURE, PRINJOB, EMPHR&M, EMSELF, PCTSTAB, PCTIN, NEWPRIN, NGRADES, and MATHMINS (see glossary for definitions).

Putting these results together, it appears that high schoolwide reading gains occur when the teachers spend a maximum amount of classroom time involved in interactive instruction and a minimum amount of classroom time teaching one-to-one, organizing the classroom, and monitoring student work.

On the average, teachers in the schools which show high reading achievement gains tend to value and use the district's instructional curriculum in their classrooms. They also have higher expectations of their students' performance than do teachers in buildings with lower average achievement gains.

Correspondingly, students in schools showing higher reading achievement gains were more often observed doing seatwork or involved in "interaction instruction" with the teacher directing the class, usually as a total group. Furthermore, students were less often observed working one-to-one with the teacher than were students in schools showing lower reading achievement gains.

The relationships among secondary and primary variables, on the other hand, are not so easily described. The percentage of teacher time spent disciplining students, for instance, is not directly correlated with READX. It is, however, correlated with the amount of time teachers in a building spend involved in interactive instruction and with the percentage of time students spend engaged in non-academic activities. Specifically, in buildings where observers found more teacher time spent disciplining students, they also observed students more often engaged in non-academic activity and teachers less often involved in interactive instruction, both of which are related to lower achievement gains in reading.

Causal Modeling

Some kind of explanatory system is clearly needed to extract the most meaning from the preceding correlational results. Joreskog's and Sorbom's LISREL mode of analysis was chosen for this purpose.

Although the LISREL technique is more properly described in a METHODS section, it is discussed here in order to illustrate its application using results of the preceding section.[5]

LISREL is a general computer program designed to treat models with latent variables or factors, measurement errors, and reciprocal causation. It assumes that there is a causal structure which links the observed variables to the latent variables and the latent variables to one another. The program provides maximum liklihood estimates of the coefficients that numerically represent these linkages.

Figure 1, on the following page, depicts a model that we have recently examined. The twelve rectangles represent observed variables and the three circles correspond to latent variables. The rectangles labeled "x" are presumed to be independent variables; the rectangles labeled "y" are considered dependent variables.

The latent variables, labeled "ξ", were generated on the basis of preliminary factor analyses. The one-way arrows between the {ξ} and the {x} indicate

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[5]The above description of LISREL is purposely abbreviated to avoid the technical language needed to fully describe the method. For those readers interested in a more comprehensive description, the authors found the two papers cited below among the more readable. (The first is a general treatment; the second is an educational research application of the method.)

1. Joreskog, Karl. "Structural Equation Models in the Social Sciences: Specification, Estimation, and Testing," in P.R. Krishnaiah (ed.) Applications of Statistics. North Holland Publishing Company, 1977.

2. Henrickson, Leslie. A Secondary Analysis of Philadelphia Reading Achievement Using Longitudinal Causal Models: Part One. Paper presented at AERA annual meeting, Los Angeles, 1981.

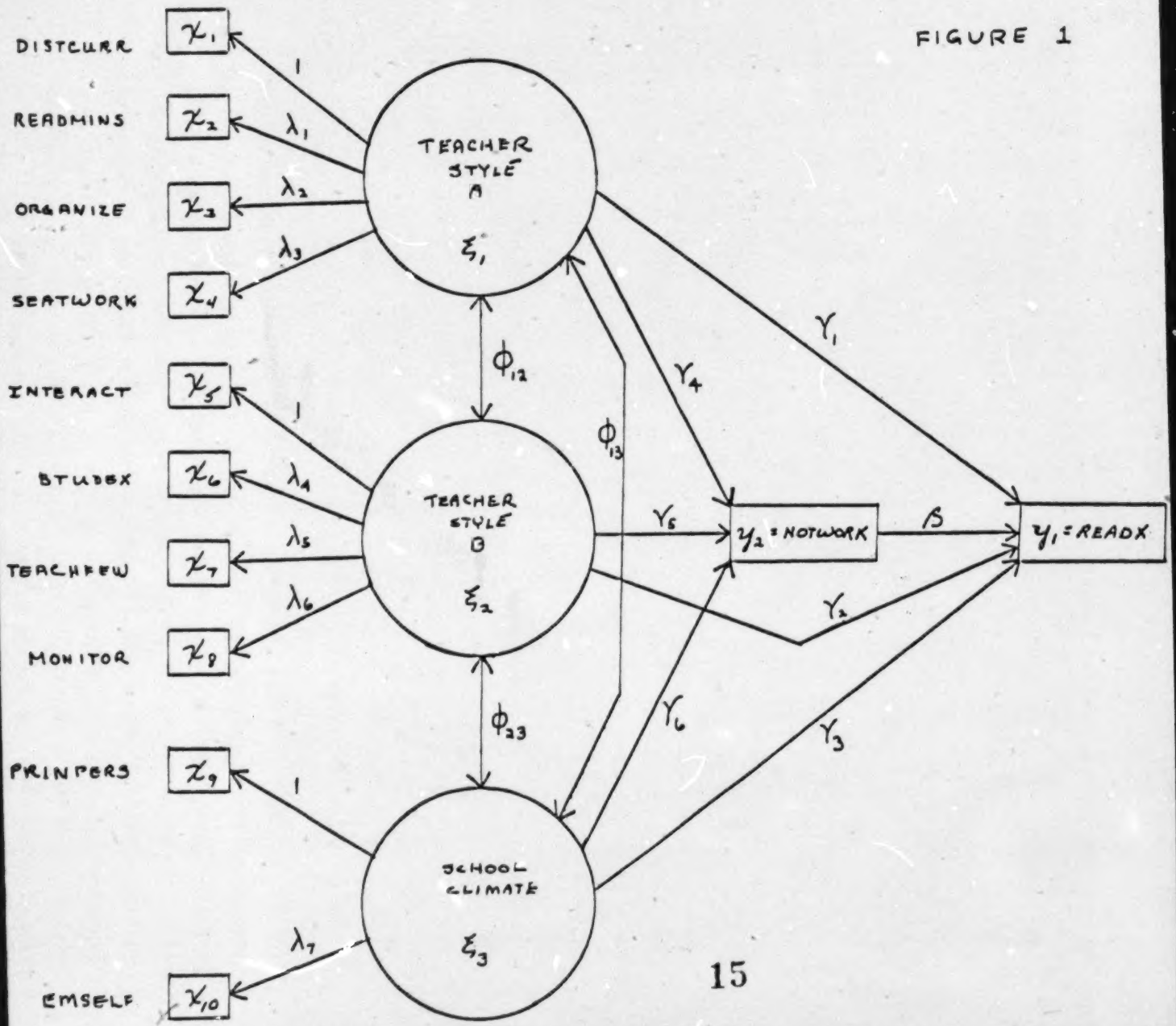
possible direct causal influences of $\{\xi\}$ on $\{x\}$ and were postulated on the basis of the pattern of loadings emerging from one of the preliminary factor analyses. The one-way arrows between the $\{\xi\}$ and the $\{y\}$ and between y_2 and y_1 also indicate possible direct causal influences; the direction of the arrows, in this case, was postulated on theoretical grounds.

The two-way arrows among the $\{\xi\}$ indicate that the latent variables may correlate with one another without any causal interpretation being given.

The task of the LISREL program is to estimate the coefficients, $\{\lambda\}$, $\{\gamma\}$, $\{\phi\}$, and $\{\beta\}$, which describe the magnitudes of the relationships among the observed independent (x), latent independent (ξ), and dependent (y) variables. In addition, the program tests the goodness of fit of the model; a χ^2 test is used to determine how well the estimates reproduce the original data matrix.

The χ^2 test applied to the model in Figure 1 indicates a poor fit; the value of χ^2 is extremely large relative to the degrees of freedom. However, this was a first effort by the authors at exploring a new methodology and the explanatory power of this particular model is admittedly not great. We are currently investigating alternative, and hopefully more illuminating, models to describe the correlational results.

FIGURE 1


DISTCURR
READMINS
ORGANIZE
SEATWORK
INTERACT
BTUDBX
TEACHFEW
MONITOR
PRINPERS
EMSELF
TEACHER STYLE A
TEACHER STYLE B
SCHOOL CLIMATE
NOTWORK
READX
1
1
1
β

DISCUSSION

As was stated in the introduction to this paper, the objectives of this study were to: (1) identify and measure school characteristics that are related to instructional effectiveness and (2) compare the index of instructional effectiveness with actual measures of school characteristics to assess the value and meaning of the index.

The results indicate that, in the subject area of reading, the first objective was wholly and the second objective partially met. The study has resulted in the identification of a number of school characteristics that correlate significantly with reading index scores. Moreover, schools with unusually high reading index scores tend to differ from those with low reading index scores in ways that are consistent with the bulk of the school effectiveness literature. These results indicate that the index has value as a measure of the effectiveness of reading instruction.

The causal modeling approach is an attempt to ascribe meaning to the index; to "explain" the interrelationships among those variables directly and indirectly related to reading achievement gains, as measured by the index. With the specification of a model that both fits the data and accounts for a substantial portion of the variability in reading index scores, we feel that the study's second objective will have been completely met.

In this connection, it should be noted that this paper is, by virtue of its timing, an interim summary of findings associated with an ongoing project in the Seattle School District. The results described herein are based on a pilot study conducted during the 1980-81 school year. The district is presently conducting a refined and expanded version of the study which also addresses math achievement gains. The purpose of the present (1981-82) year's effort is to verify the previous year's findings and also to determine which and to what extent school characteristics relate to math achievement gains.

As indicated above, we are continuing our efforts to develop a model that satisfactorily explains the relationships among a number of variables and reading

index scores. Data obtained from the 1981-82 project phase will permit us to validate the model developed on the basis of the earlier year's results; we will also have the opportunity to develop a model that relates school characteristic variables to math index scores.

ATTACHMENT A

GLOSSARY

BLDGCLIM - Building Climate
This variable represents the teachers' attitudes toward working conditions in a particular building. It is a teacher survey variable and high values indicate positive feelings about the building climate. As with all teacher survey variables, the average over all sample schools for this variable is 50; the standard deviation is 10.

DIFFWORK - Average Percent Other Subject Related
This classroom observation variable represents the average percent of a set of observations in which students were permitted to do work on a subject that was not being addressed by the rest of the class. Children working on a science project while the teacher is teaching reading to most of the class would be counted as doing DIFFWORK.

DISCPLIN - Percent Discipline
This variable represents the percent of teacher time spent disciplining students. It is a classroom observation variable and higher values represent larger portions of teacher time used to discipline students.

DISTCURR - District Curriculum
This variable indicates the collective teacher attitudes in a building toward districtwide curriculum materials. It was obtained from the teacher survey and higher values indicate higher levels of satisfaction with Districtwide curriculum materials.

EMPHR&M - Emphasis on Reading & Math
This teacher survey variable represents teachers' judgements of the sufficiency of time allotted to instruction in reading and math.

EMSELF - Emphasis on Self Concept
This teacher survey variable represents teachers' judgements of the sufficiency of the emphasis on students' self concepts.

INTERACT - Percentage of Interaction Instruction
This variable represents the average percent of a set of observations in which the teacher was observed teaching a group of students verbally while requiring responses from the students. In most cases, the entire class is involved. It is a classroom observation variable and high values indicate higher levels of interaction instruction.

LECTURE - Percent Lecture
This classroom observation variable represents the average percent of a set of observations in which the teacher is lecturing to the class.

MA&TEXTS - Materials & Texts
This variable represents the teachers' judgements of the availability of adequate materials and textbooks in a school. It is a teacher survey variable and high values indicate positive judgements concerning the availability of materials and texts.

MATHMINS - This variable represents the teachers' reports of the number of minutes per day spent on math. It is a teacher survey variable and higher values indicate a greater amount of time spent on math.

MONITOR - Percent Monitoring
This variable represents the average percent of teacher instructional time spent watching over students as they work. If the teacher settles down to work with one student for a while, the monitoring behavior becomes one-to-one instruction. It is a classroom observation variable and higher values indicate higher portions of teacher time spent performing monitoring activities.

NEWPRIN - New Principal
This variable was obtained from central district files and indicates whether or not 1980-81 was the principal's first year in a building.

NEWTEACH - New Teachers
This variable represents the percentage of teaching staff new to each building in 1980-81. It was obtained from central district files and higher values indicate larger percentages of new teachers.

NGRADES - Number of Grades
This variable indicates the number of grade levels in a building. It was obtained from district files.

NOTTEACH - This variable represents the average percent of a set of observations in which the teacher was not interacting with students. The teacher might be grading papers at a desk or talking with someone other than his or her own students. It is a classroom observation variable and higher values represent a higher frequency of non-interaction.

NOTWORK - Average Percent Not Academically Engaged
This variable reflects the average percent of a set of observations in which students were observed to be not engaged in academic activities. Pencil sharpening and desk cleaning fit this category. It was obtained from the classroom observation form. High scores indicate higher frequencies of non-engagement.

OFFWORK - Average Percent Other Non-Subject Related
This classroom observation variable represents the average percent of a set of observations in which students were observed doing work on a subject not being addressed by the rest of the class; the work was not sanctioned by the teacher. Reading comic books during math class would be counted as OFFWORK.

ONETOONE - Average Percent Student One-to-One
This variable indicates the average percentage of students involved in one-to-one activities with a teacher. It is a classroom observation variable and higher values indicate relatively higher percentages of students who worked one-to-one with the teacher during the classroom observation.

ORGANIZE - Percent Organization
This variable represents the average percent of classroom time the teacher spends performing organizational tasks--getting out texts, forming groups, etc. It is a classroom observation variable and higher values represent higher amounts of teacher time spent in organizational activities.

PCTIN - Percent In
This variable indicates the percentage of students in a school that entered after the school year began. It was obtained from district files.

PCTSTAB - Percent Stability
This variable represents the percentage of students in a school that remained in the school for a full year. It was obtained from district files.

PRINJOB - Principals' Job Orientation
This teacher survey variable represents the teachers' judgement of the building principals' job or task orientation.

PRINPERS - Principal's Personnel Orientation
This variable represents the average of teachers' judgements regarding the building principals' "people orientation." It was obtained from the teacher survey and higher values indicate higher "people orientation," of the principal as judged by teachers.

READMINS - This variable represents the teachers' reports of the number of minutes per day spent teaching reading. It is a teacher survey variable and higher values indicate a greater amount of time spent on reading.

READX - This is the schoolwide index of gain in reading achievement. Schools with students whose average gains are higher than the district average have positive scores; average gains lower than the district average yield negative scores. Scores have been adjusted for initial levels of achievement, ethnicity, and economic status.

RIF - This variable indicates the percentage of teachers in a building who were notified that their teaching position may be eliminated in the following school year. This variable was obtained through districtwide files. Higher values indicated higher percentages of teachers "RIFed."

SEATWORK - Average Percent Seat Work
This variable reflects the average percent of a set of observations in which students were observed doing academic work at their desks. It was obtained from the classroom observation form and high scores indicate relatively higher percentages of students engaged in SEATWORK.

SMALLGP - Average Percent Student Small Group
This variable represents the average percent of students observed working in small groups during an observation period. It is a classroom observation variable and higher values indicate that more students are in small groups.

STUDEX - Student Expectation
This variable represents the teachers' academic expectations for students. It was obtained from the teacher survey and higher values indicate higher expectations.

TEACHALL - This variable represents the average percentage of a set of observations in which the teacher was working with the total classroom as a group. It is a classroom observation variable and higher values indicate a higher frequency of total group instruction by the teacher.

TEACHFEW - This variable represents the average percentage of a set of observations in which the teacher is working with small group of students. It was obtained through classroom observation and higher values indicate a higher frequency of teacher instruction using small groups.

TEACHONE - Percent One-to-One (teacher)
This variable represents the average percent of a set of observations in which the teacher worked with students in a one-to-one relationship. It is a classroom observation variable and higher numbers indicate more one-to-one interaction.

TESTING - Average Percent Testing
This variable represents the average percent of students observed taking a test during an observation period. It is a classroom observation variable and higher values indicate that more students are engaged in test taking activities.

TOTALGP - Average Percent Student Total Group
This variable represents the average percent of time in which students are observed in total group activities during an observation period. It is a classroom observation variable and higher values indicate that more students are engaged in total group activities.

ATTACHMENT B

INSTRUCTIONAL STAFF SURVEY

This survey has been designed to obtain information about the instructional programs at different elementary schools. The following questions and answers should help you understand your role in this survey.

1. Will my answers be confidential?
   YES. Please do not put your name on this survey because we do not want to identify individuals.

2. Do I have to complete this survey?
   NO. Your cooperation is voluntary. However, results will be misleading if large groups of staff within some buildings refuse to answer.

3. How was I chosen to complete the survey?
   Your school is one of 21 schools chosen through a random procedure for in-depth study. Your responses are important because they will represent the responses of other staff members like you.

Thank you for your assistance.

I. In the blank to the left, please enter the number of the most correct answer.

_____1. Counting this year as one, how many years have you taught in this building?
1. 1-2 years
2. 3-4 years
3. 5-6 years
4. 7-8 years
5. 9-10 years
6. 11 or more years
7. Not applicable

_____2. Counting this year as one, how many years of total teaching experience have you acquired?
1. 1-2 years
2. 3-4 years
3. 5-6 years
4. 7-8 years
5. 9-10 years
6. 11 or more years
7. Not applicable

_____3. Under what conditions do you generally provide instruction?
1. I am a regular classroom teacher.
2. I am a special programs teacher (Title I, bilingual, etc.).
3. I am both a regular and special programs teacher.
4. I am a tutor or instructional assistant.
5. Other

_____4. Do you use ability groups/individualized instruction while teaching reading and/or math in your classroom?
1. Yes, nearly always
2. Yes, occasionally
3. No

__ __5. Are your students given special instruction designed to improve their "test taking" skills (e.g., practice with standardized question and answer formats)?
1. Yes, these skills are taught thoroughly
2. Yes, these skills are taught somewhat
3. No, these skills are not taught

_____6. Which grades do you currently teach? (You may select up to all 7 separate grades).
_____7.
_____8.
_____9.
_____10.
_____11.
_____12.

0. Kindergarten
1. First
2. Second
3. Third
4. Fourth
5. Fifth
6. Sixth

_____13-15 On the average, how many minutes of reading instruction per day do you provide to each student? (Please leave blank if not applicable.)

_____16-18 On the average, how many minutes of math instruction per day do you provide to each student? (Please leave blank if not applicable.)

II. This portion of the questionnaire is designed to obtain your opinion concerning school related issues. Please read each statement and record your response using the following scale.

1 = strongly agree
2 = agree
3 = no clear feeling
4 = disagree
5 = strongly disagree

PRINPERS 19. The principal finds time to listen to staff concerns.
PRINJOB 20. The principal routinely initiates procedures to remedy problems in the school.
PRINPERS 21. The principal is friendly and approachable.
PRINPERS 22. The principal often fails to explain his/her actions.
PRINPERS 23. The principal tries hard to create a pleasant atmosphere for staff.
PRINPERS 24. The principal seldom consults with staff before decisions.
PRINJOB 25. The principal tries to make sure that all staff members are working up to capacity.
PRINJOB 26. The principal maintains definite standards of staff performance.
PRINJOB 27. The principal makes sure that all staff members know what is expected of them.
PRINJOB 28. The principal has little control over the staff.
PRINJOB 29. The principal consistently provides leadership for the school's instructional program.
STUDEX 30. Most of my students will show at least one year's growth in academics this year.
STUDEX 31. Many of my students will have great difficulty with academics in Junior High School.
STUDEX 32. Many of my students probably will leave school before high school graduation.
STUDEX 33. Nearly all of my students will be at or above grade level by the end of this year.
DISTCURR 34. Districtwide instructional objectives stifle student learning.
DISTCURR 35. I find the Districtwide curriculum useful in meeting the needs of my students.
DISTCURR 36. When possible, Districtwide curriculum guides should be followed.
DISTCURR 37. The implementation of Districtwide instructional objectives increases student achievement.
DISTCURR 38. Districtwide curriculum materials are useful in my classroom.
BLDGCLIM 39. Working conditions in this building make it hard to do a good job.
BLDGCLIM 40. I like my job.
BLDGCLIM 41. I like working in this building.
MAGTEXTS 42. I have sufficient supplies and materials to teach as I want.
MAGTEXTS 43. This school needs more copies of the basal texts adopted by the District.
BLDGCLIM 44. I do not feel like an important part of this school.
BLDGCLIM 45. At this building considerable discord exists among staff members.
BLDGCLIM 46. Staff members at this building are very supportive.
BLDGCLIM 47. Staff members at this building tend to be unhappy.
BLDGCLIM 48. Students fight a lot at this school.
BLDGCLIM 49. A good working relationship exists between classified staff (secretaries, aides, etc.) and instructional staff in this building.
EMPHREM 50. The amount of time spent directly teaching math and reading at this school should be increased.
EMPHREM 51. Presently, there is too little emphasis placed on improving basic skills.
EMSELF 52. Presently, there is too little emphasis placed on improving the self concept of students.

_____53-55 (School Security Code)